

**Notice of Allowability**

Application No.

10/600,778

Examiner

Phuong N. Hoang

Applicant(s)

FORMAN, LANE SCOTT

Art Unit

2194

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address--

All claims being allowable, PROSECUTION ON THE MERITS IS (OR REMAINS) CLOSED in this application. If not included herewith (or previously mailed), a Notice of Allowance (PTOL-85) or other appropriate communication will be mailed in due course. **THIS NOTICE OF ALLOWABILITY IS NOT A GRANT OF PATENT RIGHTS.** This application is subject to withdrawal from issue at the initiative of the Office or upon petition by the applicant. See 37 CFR 1.313 and MPEP 1308.

1. ☒ This communication is responsive to Interview and examiner's amendment.
2. ☒ The allowed claim(s) is/are 1 - 8, 11 - 12; now renumbered as 1 - 10.
3. ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☐ All b) ☐ Some\* c) ☐ None of the:
1. ☐ Certified copies of the priority documents have been received.
2. ☐ Certified copies of the priority documents have been received in Application No. \_\_\_\_\_.
3. ☐ Copies of the certified copies of the priority documents have been received in this national stage application from the International Bureau (PCT Rule 17.2(a)).

\* Certified copies not received: \_\_\_\_\_

Applicant has THREE MONTHS FROM THE "MAILING DATE" of this communication to file a reply complying with the requirements noted below. Failure to timely comply will result in ABANDONMENT of this application.  
**THIS THREE-MONTH PERIOD IS NOT EXTENDABLE.**

4. ☐ A SUBSTITUTE OATH OR DECLARATION must be submitted. Note the attached EXAMINER'S AMENDMENT or NOTICE OF INFORMAL PATENT APPLICATION (PTO-152) which gives reason(s) why the oath or declaration is deficient.
5. ☐ CORRECTED DRAWINGS (as "replacement sheets") must be submitted.
- (a) ☐ including changes required by the Notice of Draftsperson's Patent Drawing Review (PTO-948) attached
- 1) ☐ hereto or 2) ☐ to Paper No./Mail Date \_\_\_\_\_
- (b) ☐ including changes required by the attached Examiner's Amendment / Comment or in the Office action of Paper No./Mail Date \_\_\_\_\_
- Identifying indicia such as the application number (see 37 CFR 1.84(c)) should be written on the drawings in the front (not the back) of each sheet. Replacement sheet(s) should be labeled as such in the header according to 37 CFR 1.121(d).
6. ☐ DEPOSIT OF and/or INFORMATION about the deposit of BIOLOGICAL MATERIAL must be submitted. Note the attached Examiner's comment regarding REQUIREMENT FOR THE DEPOSIT OF BIOLOGICAL MATERIAL.

**Attachment(s)**

1. ☒ Notice of References Cited (PTO-892)
2. ☐ Notice of Draftsperson's Patent Drawing Review (PTO-948)
3. ☐ Information Disclosure Statements (PTO/SB/08),  
Paper No./Mail Date \_\_\_\_\_
4. ☐ Examiner's Comment Regarding Requirement for Deposit of Biological Material
5. ☐ Notice of Informal Patent Application
6. ☒ Interview Summary (PTO-413),  
Paper No./Mail Date \_\_\_\_\_
7. ☒ Examiner's Amendment/Comment
8. ☒ Examiner's Statement of Reasons for Allowance
9. ☐ Other \_\_\_\_\_

### **EXAMINER'S AMENDMENT**

1. An examiner's amendment to the record appears below. Should the changes and/or additions be unacceptable to applicant, an amendment may be filed as provided by 37 CFR 1.312. To ensure consideration of such an amendment, it **MUST** be submitted no later than the payment of the issue fee.
2. Authorization for this examiner's amendment was given in a telephone interview with Mr. Rupark Nag on 1/15/08.

Amend the claims in accordance to the attachment in the fax, filed by applicant.

### **REASON FOR ALLOWANCE**

3. The following is an examiner's statement of reasons for allowance:
4. The steps of creating a parent process on the server, the configuration file containing service definition; creating a child process on the server; creating a plurality of worker threads within the child process, wherein one of the plurality of worker threads operates in an infinitive loop and enters a cross-process section that enables only one worker thread in the child process to call a socket select function; the one worker thread calling an accept function of a request socket to obtain a client connection, when taken in the context of claims as a whole, is not taught by Smith and Chang (US patent no. 6,938,211). Moreover, evidence for the modifying the prior art teachings by one of ordinary skill level in the art was not uncovered so as to result in the invention as recited in claim 1.

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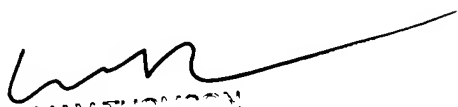
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5. Any inquiry concerning this communication or earlier communications from the examiner should be directed to Phuong N. Hoang whose telephone number is (571)272-3763. The examiner can normally be reached on Monday - Friday 9:00 am to 5:30 pm.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, William Thomson can be reached on 571-272-3718. The fax phone number for the organization where this application or proceeding is assigned is 571-273-8300.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free). If you would like assistance from a USPTO Customer Service Representative or access to the automated information system, call 800-786-9199 (IN USA OR CANADA) or 571-272-1000.

Ph  
January 17, 2008

  
WILLIAM THOMSON  
SUPERVISOR, ART UNIT 2194

1. (currently amended) A method of servicing a client request in a server comprising:

creating a parent process on the server, wherein the parent process reads a configuration file, the configuration file containing service definitions, a service load indicator, and socket data;

creating a child process on the server;

creating a plurality of worker threads within the child process, wherein one of the plurality of worker threads operates in an infinite loop and enters a cross-process section that enables only one worker thread in a the child process to call a socket select function;

the one worker thread calling an accept function of a request socket to obtain a client connection;

determining a first service interface subclass corresponding to the client request from one or more service interface subclasses derived from a request interface base abstract class wherein ~~each~~ the first service interface subclass is defined for ~~each a~~ socket; and

servicing the client request using the first service interface subclass, wherein the first service interface subclass corresponds to at least one service provided by the server at a corresponding port wherein the at least one service[s] provided by the server ~~are~~ is identified by the corresponding port[s].

2. (original) A method according to claim 1, wherein the one or more service interface subclasses comprise at least one protocol handler for servicing the client request at the corresponding port.

3. (currently amended) A method according to claim 1, wherein the first service interface subclass is determined from a the configuration file.

4. (currently amended) A method according to claim 3, wherein the configuration file comprises descriptions of

the ~~one or more~~ services provided by the server; and

the corresponding port[s] for the ~~one or more~~ at least one service[s].

5. (original) A method according to claim 1, wherein one of the one or more service interface subclasses is configured to service Post Office Protocol requests at the corresponding port.
6. (original) A method according to claim 1, wherein one of the one or more service interface subclasses is configured to service Simple Mail Transfer Protocol requests at the corresponding port.
7. (currently amended) A method according to claim 1, wherein ~~a parent process performs the determining~~ a first service interface subclass and servicing the client request are performed by the parent process.
8. (currently amended) A method according to claim 7, ~~further comprising: creating one or more child processes, wherein the one or more child processes~~ are wherein the child process is configured to service the client request[s].
9. (cancel) A method according to claim 8, further comprising: creating one or more execution threads for each child process.
10. (cancel) A method according to claim 9, further comprising: selecting a socket requested by the client request;  
blocking the selected socket; and
11. (original) A method according to claim 1, wherein the at least one service includes a scanning service.
12. (original) A method according to claim 8, further comprising: adjusting a number of child processes according to a load of the server.
- 13-24. Cancel